AIR FORCE QUALIFICATION TRAINING PACKAGE (AFQTP)



for UTILITIES SYSTEMS (3E4X1)

MODULE 8

COMMUNICATIONS

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Career Field Education and Training Plan (CFETP) references from 1 Apr 97 version.

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AIR FORCE QUALIFICATION TRAINING PACKAGES for UTILITIES SYSTEMS (3E4X1)

INTRODUCTION

Before starting this AFQTP, refer to and read the "Trainee/Trainer Guide" located on the AFCESA Web site http://www.afcesa.af.mil/

AFQTPs are mandatory and must be completed to fulfill task knowledge requirements on core and diamond tasks for upgrade training. It is important for the trainer and trainee to understand that an AFQTP does not replace hands-on training, nor will completion of an AFQTP meet the requirement for core task certification. AFQTPs will be used in conjunction with applicable technical references and hands-on training.

AFQTPs and Certification and Testing (CerTest) must be used as minimum upgrade requirements for Diamond tasks.

MANDATORY minimum upgrade requirements:

Core task:

AFQTP completion Hands-on certification

Diamond task:

AFQTP completion CerTest completion (80% minimum to pass)

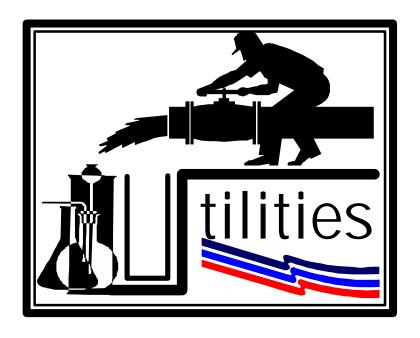
<u>Note</u>: Trainees will receive hands-on certification training for Diamond Tasks when equipment becomes available either at home station or at a TDY location.

Put this package to use. Subject matter experts under the direction and guidance of HQ AFCESA/CEOT revised this AFQTP. If you have any recommendations for improving this document, please contact the Career Field Manager at the address below.

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COMMUNICATIONS

MODULE 8 AFQTP UNIT 1

USE RADIOS (8.1.)

Task Training Guide

STS Reference	8.1., Use Radios	
Number/Title:		
Training References:	• AFI 33-106	
	• AFMAN 24-306	
	• CDC 3E451A	
	Manufacturers' Manuals	
Prerequisites:	Possess as a minimum a 3E431 AFSC.	
Equipment/Tools	Tools • Transmitter and a receiver	
Required:	Two-Way Radio	
Learning Objective:	Trainee will be able to properly communicate utilizing a radio,	
	proper call signs, and radio disipline.	
Samples of Behavior:	Trainee will properly communicate utilizing a radio, knowing	
	required call signs, and what can and can not be transmitted on	
	radio.	
Notes:		

Background: In the civil engineering business, communication between workers, planners, schedulers, and supervisors is essential. One of the best instruments for achieving this is the two-way radio. As the name implies, messages may be transmitted and received instantaneously between two parties. At the "push of a button", planners or schedulers can transmit emergency, urgent, or routine job orders to craftsmen in the field without delay. Also, workers can keep coordinators and supervisors informed on the status of work orders that demand the highest sense of urgency and immediate interest. Like any good "tool," radios can also be misused. "Chit-chat", cursing, insults, or any language that wouldn't represent "professional" communication should never be heard when using two way radios.

Remember that two parties are not the only ones that can hear the transmission conversations, but also everyone tuned-in to the same channel (sometimes even the base commander). Exercise "Communication Security" (COMSEC). Be aware of what can be transmitted over the radio and what can't, or shouldn't be discussed (i.e. classified, slanderous, or unprofessional language). Remember that radios are "For Official Use Only". If personal messages or any other items not appropriate for the net (network) need to be sent, ask the party to contact you on a land-line (telephone) as soon as the opportunity arises. Exercise extreme care when handling and carrying radios. Sometimes we may get so pre-occupied with the immediate task that we forget or misplace our radios. Other times, we may be working in areas that may cause radios to be damaged or destroyed. Use common sense! Remember that you are responsible for your tools, and your radio is no exception. To better acquaint you with radio usage, here are some key points to remember:

NOTE:

Each CE unit may have different radio procedures; however, most will follow similar guidelines.

NOTE:

When transmitting information, two-way radio is the least secure forms of communication.

BASIC POINTERS ON TWO-WAY RADIO USAGE:

- 1. Know the operation of the hand radio issued by your unit (see manufacturer's manual if necessary).
- 2. If you don't already have one, ask your radio controller for a call sign that will uniquely identify you (i.e. CE 13, CE 16, CE 22, etc.).
- 3. Know call signs of other work areas or parties (Fire Dept, control centers, etc).
- 4. Exercise "Communication Security" (COMSEC). Be aware of what can be transmitted over the radio and what can't, or shouldn't be discussed (i.e. classified, slanderous, or unprofessional language). Remember, radios are "for official use only".

- 5. Exercise extreme care when handling and carrying radios. Sometimes we may get so preoccupied with the immediate task that we forget or misplace our radios. Other times, we may be working in areas that may cause radios to be damaged or destroyed. Use common sense! Remember that you are responsible for your tools, and your radio is no exception.
- 6. Keep radios properly charged. Before you get in your truck, ensure the battery is completely charged and test your radio.

PROCEDURES FOR TRANSMISION OF INFORMATION

- **Step 1:** Obtain call sign from supervisor or CE Control desk. Ask supervisor what your particular call sign will be. If radio has multiple channels ask supervisor to identify each channel.
- **Step 2:** Turn on radio, turn channel selector button to CE channel, and adjust volume to appropriate level. Test the radio, simply press the transmit button and state, "CE control...radio check". Then release the transmit button and wait for, "Loud and Clear". Keep radios properly charged. Before you get in your truck, ensure the battery is completely charged and test your radio
- **Step 3:** Depress the button on the side of the radio. Speak into the microphone with a normal speaking voice. Do not hold the radio too close to your mouth; this will distort your voice. Always give the call sign of whom you are trying to reach first, then give your call sign, then release the transmitting button. After receiving a reply, press transmit button and relay your message. Don't transmit any information until you have received acknowledgment that contact has been established.
- **Step 4:** When you receive information, always acknowledge the other party by repeating the information given to avoid confusion.
- **Step 5:** Propely store radio, at the end of the day secure radio in accordance with shops' policy.

Review Questions for Use Radios

	Question		Answer
1.	What should never be heard over two-way	a.	"Chit-chat"
	radios?	b.	Cursing
		c.	Insults
		d.	All of the above
2.	To best learn how to use your radio, follow	a.	True
	your coworkers' instructions.	b.	False
3.	What guidance will help you avoid	a.	OPSEC
	discussing classified information over	b.	COMOUT
	radios?	c.	COMSEC
		d.	COMPUSEC
4.	Each CE unit may have different radio	a.	True
	procedures; however, most will follow similar guidelines.	b.	False
5.	If you must get a personal message to a	a.	True
	fellow worker, make the best use of this	b.	False
	great "tool" and briefly transmit the		
	message.		
6.	If you don't already have one, create your	a.	True
	own radio call sign that will uniquely	b.	False
	identify you.		
7.	Before you get in your truck,	a.	Ensure the battery is completely charged
			and test your radio
		b.	Ensure your radio is off
		c.	Check the serial number on your radio
		d.	None of the above

Performance Checklist							
Step	Yes	No					
1. Does the trainee know where to find instructions to use his/her radio?							
• AFI 33 –106							
• AFJMAN 24-306							
 Manufacturers' Manuels 							
2. Did the trainee identify key elements of COMSEC?	2. Did the trainee identify key elements of COMSEC?						
 Information that can be transmitted. 							
 Least secure form of communication. 							
3. Can the trainee identify basic points on two-way communication?							
 Know the operation of issued radio. 							
 Properly acquire call sign. 							
 Identify the call sign of key personnel. 							
 Exercise Communication Security (COMSEC). 							
 Exercised extreme care while handling radio. 							
 Insured radio was charged properly. 							
4. Did trainee properly transmit information?							
Obtain call sign.							
Turn radio on, select correct channel, and test radio for proper							
operation.							
Depressed button and clearly transmit information.							
Acknowledge other party transmission.							
 Properly store radio after completion of transmission. 							

FEEDBACK: Trainer should provide both positive and/or negative feedback to the trainee immediately after the task is performed. This will ensure the issue is still fresh in the mind of both the trainee and trainer.

Air Force Civil Engineer QUALIFICATION TRAINING PACKAGE (QTP)

REVIEW ANSWER KEY



For UTILITIES SYSTEMS

(3E4X1)

MODULE 8

COMMUNICATIONS

(3E4X1-8.1.)

	Question		Answer
1.	What should never be heard over two way radios?	d.	All of the above
2.	To best way to learn how to use your radio, follow your teammates' instructions.	b.	False
3.	What guidance will help you avoid discussing classified information over radios?	c.	COMSEC
4.	Each CE unit may have different radio procedures; however, most will follow similar guidelines.	a.	True
5.	If you must get a personal message to a fellow worker, make the best use of this great "tool" and briefly transmit the message.	b.	False
6.	If you don't already have one, create your own radio call sign that will uniquely identify you.	b.	False
7.	Before you get in your truck,	a.	Ensure the battery is completely charged and test your radio